



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

mk

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,802	02/22/2002	Joseph R. Guckert	TK3635USNA	9860

23906 7590 03/29/2004

E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/080,802

Applicant(s)

GUCKERT ET AL.

Examiner

Cheryl Juska

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5 & 9/02, 01/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant traverses the restriction requirement on the grounds that the examiner did not provide a sufficient basis for restriction (Remarks, page 2). Applicant's traversal is found persuasive and the restriction requirement is hereby withdrawn.

2. Applicant also traverses the 103 rejection of claims 1-7 under 35 USC 103 as being obvious over US 5,424,115 issued to Stokes in view of US 3,427,376 issued to Dempsey (Remarks, pages 2-3). The arguments thereto have been considered and found persuasive. Thus, said rejection is hereby withdrawn.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. An elastomer-coated backup roll having a Shore A hardness of 50-80 critical or essential to the practice of the invention, but not included in the claims is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). In applicant's traversal of the prior art rejection, applicant states, "the bonding parameters required to obtain the conditions/results of claim 1, i.e. such that the bonds are not translucent, include using an elastomer-coated backup roll having a Shore A hardness of 50-80, embossing roll

Art Unit: 1771

temperatures between about 160-190 C and bonding pressures which are the minimum necessary to provide structural integrity to the nonwoven sheet” (Remarks, sentence spanning pages 2-3). Additionally, the specification teaches, “In contrast [to the prior art processes], according to the process of the present invention, a much softer backup roll of 60-70 Shore A is employed, in order to reduce the pressure applied from each point of the embossed pattern.” (Specification, page 5, lines 20-22.) Thus, it is argued that the claims are not enabled since the critical element of the Shore A hardness for the elastomer-coated backup roll is not recited.

***Claim Rejections - 35 USC § 102/103***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 8, 15, and 16 are rejected under 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as being unpatentable over US 5,851,936 issued to Marshall.

Marshall discloses a flash spun film-fibril nonwoven sheet that is point bonded on both sides and has an opacity of greater than 85%, preferably 90% (abstract, col. 1, lines 56-60, col. 3, lines 14-33, and col. 5, lines 3-7). Presumably, to have an opacity as disclosed by Marshall, the

Art Unit: 1771

bonding temperature, pressure, and residence time must inherently be sufficient to produce the non-translucent bond points. The burden is upon applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the alternative, the claimed process temperature, pressure, and time would obviously have been provided by the process disclosed by Marshall. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 1, 8, 16 are rejected.

With respect to claim 15, it is noted that Marshall also teaches a rib bonding pattern (col. 6, lines 13-18). Thus, claim 15 is also rejected.

8. Similarly, claims 10, 11, 14, 18-20, and 24 are rejected under 35 USC 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as being unpatentable over the cited Marshall patent.

Claims 10, 11, 14, 18-20, and 24 limit the nonwoven of claims 8 and 16 to having specified physical properties. It is argued that said properties are inherent to the nonwoven of claims 8 and 16 since the Marshall nonwoven meets the structural limitations presently claimed. The burden is upon applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the alternative, the claimed physical properties would obviously have been provided by the process disclosed by Marshall. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, said claims are rejected.

9. Claims 1-5, 8, 9, 12, 13, 16, and 17 are rejected under 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as being unpatentable over US 5,424,115 issued to Stokes.

Stokes discloses a point bonded nonwoven fabric made from bicomponent fibers comprising a polyolefin and a polyamide (abstract). The nonwoven is point bonded with a bond surface area range of 5-50% and number of emboss points ranges from 50-1500/in<sup>2</sup> (about 8-230/cm<sup>2</sup>) (col. 4, lines 25-34). Although Stokes does not discuss the opacity of the bond points, it is reasonable to presume said bond points would not be translucent. Support for said presumption is found in the fact that the bonding process conditions are such that only the lower melting point polyolefin component is fused, while the polyamide component remains unchanged. As such, the bond points would remain opaque due to the presence of the unmelted polyamide component of the fibers. The burden is upon applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the alternative, the claimed process conditions and translucency would obviously have been provided by the process disclosed by Marshall. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 1-5, 8, 9, 12, 13, 16, and 17 are rejected.

10. Similarly, claims 11, 14, 19, 20, and 24 are rejected under 35 USC 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as being unpatentable over the cited Stokes patent.

Claims 11, 14, 19, 20, and 24 limit the nonwoven of claims 8 and 16 to having specified physical properties. It is argued that said properties are inherent to the nonwoven of claims 8 and 16 since the Stokes nonwoven meets the structural limitations presently claimed. The burden is upon applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the alternative, the claimed physical properties would obviously have been provided by the process disclosed by

Art Unit: 1771

Stokes. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Therefore, said claims are rejected.

***Claim Rejections - 35 USC § 103***

11. Claims 2-5, 9, 12, 13, and 17 are rejected under 35 USC 103(a) as being unpatentable over the cited Marshall patent in view of US 5,424,115 issued to Stokes.

Marshall is silent with respect to the percentage of the cross-sectional area of point bonding and the number of bosses/cm<sup>2</sup>. Hence, one must look to the prior art for guidance. However, the presently claimed area percentages and boss numbers are well known in the art. For example, as noted above, Stokes teaches a point bonded nonwoven fabric wherein the total bonded area of the nonwoven ranges from 5-50% and the number of emboss points ranges from 50-1500/in<sup>2</sup> (about 8-230/cm<sup>2</sup>) (col. 4, lines 25-34). Thus, it would have been obvious to one of ordinary skill in the art to employ the claimed bond cross-sectional area and number of bosses per area since these values are known in the art to produce successful point bonded nonwovens. Therefore, claims 2-5, 9, 12, 13, and 17 are rejected.

12. Claims 5 and 6 are rejected under 35 USC 103(a) as being unpatentable over the cited Marshall patent.

Claims 5 and 6 are rejected under 35 USC 103(a) as being unpatentable over the cited Stokes patent.

Neither Marshall nor Stokes explicitly teach the claimed bonding pressure or residence time. However, it would have been obvious to one of ordinary skill in the art to modify the

Art Unit: 1771

pressures and times disclosed in the cited prior art. Specifically, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215. It is readily recognized in the art of point bonding nonwovens that bonding pressure, temperature, time, roll hardness, and percent bond area are variables which affect the structural integrity, tensile strength, and opacity of the point bonds. Hence, it would have been obvious to one of ordinary skill in the art to optimize any of said variables to achieve the desired bond effect. Therefore, claims 5 and 6 are rejected over the cited prior art.

13. Claim 15 is rejected under 35 USC 103(a) as being unpatentable over the cited Stokes patent in view of the cited Marshall patent or US 4,091,137 issued to Miller.

Stokes does not explicitly teach the claimed ribbed point bonding pattern of claim 15. However, said pattern is well known in the art. For example, Marshall teaches a rib bonding pattern (col. 6, lines 13-18). Miller teaches a similar rib bonding pattern (col. 9, lines 1-10). Thus, it would have been obvious to employ the known rib embossing pattern to both sides of the nonwoven of Stokes in order to provide sufficient integrity to the nonwoven. Therefore, claim 15 is rejected as being obvious over the cited prior art.

14. Claims 21-23 are rejected under 35 USC 103(a) as being unpatentable over the cited Marshall patent.

Claims 21-23 are rejected under 35 USC 103(a) as being unpatentable over the cited Stokes patent.

Claims 21-23 are drawn to a bed linen, protective apparel, and an operating room drape, respectively, made from nonwoven sheet of claim 8. It is argued that claims 21-23 are rejected along with claim 8 since the preamble limitations of said bed linen, protective apparel, and an



Art Unit: 1771

operating room drape merely describe an intended use, rather than adding any structural features to the nonwoven sheet of claim 8. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In the event, said preamble limitations are given patentable weight, it is argued that it is well known in the art to make the claimed articles out of disposable nonwoven materials. Thus, it would have been obvious to one skilled in the art to employ the nonwoven according to Marshall or Stokes for bed linens, protective apparel, or an operating room drape in order to expand the number of applications of said nonwoven. Therefore, claims 21-23 are rejected.

### ***Conclusion***


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHERYL A. JUSKA  
PRIMARY EXAMINER

cj  
March 20, 2004